

START

United States Government

0025245

9208765

Department of Energy

Richland Operations Office

memorandum

DATE: DEC 8 1992
 REPLY TO: SFD:JMG 92-CAB-308
 ATTN OF:

SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) CATEGORICAL EXCLUSION (CX)
 DETERMINATION: INSTALLATION OF TANK 241-SY-101 MIXER PUMP AND ANCILLARY
 EQUIPMENT SUPPORT STRUCTURE CONCRETE LAYDOWN PAD, 200 WEST AREA, HANFORD
 SITE

TO: Carol M. Borgstrom, Director
 Office of NEPA Oversight
 EH-25, HQ

Using authority delegated to me by the Assistant Secretary for Environmental Restoration and Waste Management (EM-1), I have determined that the subject proposed action fits within a Typical Class of Action currently available for Categorical Exclusion (CX) in Subpart D of the U.S. Department of Energy (DOE) National Environmental Policy Act (NEPA) Implementing Procedures.

The enclosed CX is provided for your review as required by DOE Order 5440.1D. If you have any questions, you or your staff may contact Mr. John M. Gray, of the Office of Tank Waste Storage on (509) 376-9783, or the DOE Richland Field Office NEPA Compliance Officer, Mr. P. F. X. Dunigan, Jr., on (509) 376-6667.

for
 John D. Wagoner
 Manager



Enclosures:

1. Information Bulletin
2. CX Determination

cc w/encls:
 L. P. Duffy, EM-1
 J. C. Tseng, EM-36
 R. S. Scott, EM-20
 D. Henninger, EM-331 (2 copies)
 M. H. Killinger, PNL w/o encls.

RECEIVED
 R. H. ENGELMAN

DEC 10 1992

ACTION: Incoming
 COPIES: 5
 ROUTE: J. Centsch, G. Christensen
 FILE:



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bcc:
TWS FILE 1400.13
TWS RDG FILE
JMG RDG FILE
GWR RDG FILE
MGR RDG File
SFD RDG FILE
CAB RDG FILE

P. F. X. Dunigan, Jr., EAP w/encls.
R. H. Engelmann, WHC w/encls.
H. E. McGuire, WHC

Concurrence: Gray/Christensen/Gerton/SID:Pasternak/K.
Clarke/Carosino/Dunigan/Anttonen/Hamrick/Wagoner

RECORD NOTE: The CX was received 4:15 on December 2. a copy faxed to Paul Dunigan was not received, and a copy was provided at 11:00 on Dec 3. Mr. Dunigan reviewed the documents and advised Gray to submit it via this memo at 2:45 Dec 3. WHC had asked that this be processed complete on Dec 3 prior to Mr. Dunigan's departure on Dec 4-5, but that was not possible. The project is being delayed on a day-for-day basis during this period, following the belated recognition by WHC that NEPA action was required for the pump holding pad. Weather may further intrude on the schedule during this period. ATTACHMENT 1 WAS REVISED TO DELETE MENTION OF A HEPA FILTER PER WHC REQUEST FROM S. TIEFT 9:30 AM DEC 4.

OFFICE >	SFD	SFD	TWS	SID	EAP	OCC
SURNAME >	GRAY	CHRISTENSEN	GERTON	PASTERNAK	CLARKE	CAROSINO
DATE >	DEC 4 '92	12/4/92	12/4/92	12/4/92	12/4/92	12/4/92
OFFICE >	EAP	TRW	DEP	MGR		
SURNAME >	DUNIGAN	ANTTONEN	HAMRICK	WAGONER		
DATE >	12/6	12/7		12/8		

(Please Return To Cathy Poynor, A4-02, 6-3214)



12S 18668 RL

9258943

Attachment 1

93126931223


REGULATORY SUPPORT

S. R. Tiffa

Date _____

B. F. Archer
B. F. Archer

Date _____


R. H. Engelmann, Manager
NEPA Documentation
Westinghouse Hanford Company

Date _____

I have reviewed the enclosed document and state to the best of my knowledge, that the material is true and accurately presented. I understand that this document will be used by DOE as a basis for making a NEPA determination regarding the proposed activity.

Jack Zentner
Signature

Date _____

INFORMATION BULLETIN

PROPOSED ACTION: INSTALLATION OF TANK 241-SY-101 MIXER PUMP AND ANCILLARY EQUIPMENT SUPPORT STRUCTURE CONCRETE LAYDOWN PAD, 200 WEST AREA, HANFORD SITE, RICHLAND, WASHINGTON

DESCRIPTION OF PROPOSED ACTION

The proposed action would be to install and operate an emergency concrete laydown pad within the 241-SY Tank Farm. The pad would provide radiological shielding and impoundment for potentially contaminated material that could leak from the equipment removed from Tank 241-SY-101. The overall length of the pad would be approximately 112 feet long and 32 feet wide at one end, and 20 feet wide at the other (Figures 1 and 2). The pad and liner would be constructed to provide low point collection of liquids.

The tank equipment would be triple rinsed as it is removed from the tank with the rinse water being kept within the tank. Triple rinsing would permit the equipment to be classified as low level waste if it is determined to be no longer usable. When the equipment (e.g., mixer pump and other ancillary equipment) is removed from the tank riser, it would be sheathed in a heavy flexible (herculite) sleeve to maximize the containment of any free liquid that did not drain into the tank.

When the sheathed pump is removed, it would be placed in a transport cradle located on the pad. The cradle would be constructed of structural carbon steel. The structural members would be sheathed between two layers of carbon steel 1/4 inch thick plates. The cradle would be constructed to be water tight. Water tightness would be ensured by performing an acceptance leak test. There would be a gasket between the hinged cover and the vertical sides of the cradle to prevent contaminated air from reaching the environment.

The pad would be lined with carbon steel plate to provide the primary containment external to the cradle and serve as the secondary containment boundary. The initial use of the pad would be used to accommodate the 241-SY-101 mixer pump when it is removed from the tank for repairs, or storage until final disposition of the pump is determined. Initially, the carbon steel pad liner would not have a protective coating until after the 241-SY-101 Tank test mixer pump is installed and becomes operational. Once the pump is determined to be operational, the liner would be coated in a manner to minimize corrosion and to maximize the decontamination potential. Added pre-cast concrete shielding walls around the perimeter of the pad would protect personnel working in the area from radiation exposure. The height of the wall would provide adequate radiation shielding to protect the tank farm workers.

There would be a variety of construction activities required for installation of the pad:

- Relocation of the existing tank farm boundary fence to include the pad within the new designated tank farm boundary

- Installation of a concrete pad to accommodate the mixer pump and other miscellaneous mitigation test equipment when the equipment is not installed in Tank 241-SY-101
- Installation of required shielding precast concrete wall around the pad

Design and construction of the pad would be in accordance with "90 Day Storage" requirements.

The pad would not be installed over any of the tanks within the tank farm.

Excavated soil would be used for fill or spread to the greatest extent possible.

If the pump is installed in the transport cradle, routine surveillance would be performed by tank farm personnel to ensure no liquid accumulation in the sump.

The maximum volume of contaminated liquid that could leak to the pad sump from the pump in the cradle would be 60 gallons. The liquid would be mixed with absorbent material and loaded into approved disposal drums. The quantity of this material that would be loaded into the drums would be limited to less than or equal to 200 millirem per hour at contact on the outside of the drum. Appropriate operational procedures would be in place before the pad would be utilized.

Based on current air permitting regulations and agreements with the State of Washington Department of Ecology, no air permit is required for the proposed action. The cradle assembly would not be power ventilated, but passively ventilated, which does not require air permitting.

The approval of the pad installation is needed as soon as possible in order to ensure the pad would be ready for use prior to the pump being brought into the tank farm during the window "H" burp. The proposed action is Environmental Restoration and Waste Management sponsored and would be a Capital Expense Not Related to Construction funded activity, which would cost approximately \$400,000.

IMPACTS

The following checklist summarizes environmental impacts that were considered for the proposed action for both construction and operation. All "YES" answers are explained in detail in the text following the following checklist:

IMPACT TO AIR

Would the proposed action:		YES	NO
1	Result in gaseous discharges to the environment?	X	
2	Release particulates or drops to the atmosphere?	X	
3	Result in thermal discharges to the environment?	X	
4	Violate federal, state, or local emission standards?		X
5	Cause any other atmospheric disturbance?		X
6	Violate ambient air quality standards (e.g., CO, NO ₂)		X
7	Increase offsite radiation dose to >0.1 mrem (40 CFR 61 Subpart H)?		X

IMPACT TO WATER

Would the proposed action:		YES	NO
8	Discharge any liquids to the environment?	X	
9	Discharge heat to surface or subsurface water?		X
10	Alter stream flow rates?		X
11	Significantly alter natural evaporation rates?		X
12	Release soluble solids to natural waters?		X
13	Provide Interconnection between aquifers?		X
14	Require installation of wells?		X
15	Require a Spill Control and Prevention Plan?		X
16	Violate water quality standards (COD, BOD, pH etc.)		X

IMPACT TO LAND

Would the proposed action:		YES	NO
17	Conflict with existing zoning or land use?		X
18	Be located on wetlands?		X
19	Be located on the 100-year floodplain?		X
20	Generate non-hazardous solid waste?	X	
21	Create hazardous, radioactive, PCB, or asbestos waste?	X	
22	Cause erosion?		X
23	Impact prime or unique farmland?		X
24	Be located on the Arid Land Ecology Reserve?		X
25	Require excavation permit?	X	
26	Disturb an undeveloped area?		X

GENERAL

Would the proposed action:		YES	NO
27	Increase noise level?	X	
28	Adversely impact wildlife or critical habitat?		X
29	Be within the Hanford Reach Study Area?		X
30	Make a long-term commitment of nonrenewable resources?		X
31	Require new utilities or modifications to utilities?		X
32	Use pesticides, carcinogens, or toxic chemicals?		X
33	Require a radiation work permit?	X	
34	Adversely affect archaeological or historical property?		X

The proposed action would result in minor amounts of gaseous discharge to the environment from the operation of machinery and vehicles necessary to complete the work, but can be considered insignificant when compared to overall sitewide discharges.

Particulates, in the form of dust, would be generated from the excavation activities, but would also be considered minor relative to sitewide releases, and would be mitigated when necessary.

Minor amounts of thermal discharges would be expected to occur from the operation of vehicles and equipment, but would cease when activities are completed.

A small amount of liquid could leak to the environment during the process of transferring equipment from the tank riser to the laydown pad. Appropriate ground cover (plastic) would be installed between the tank and the laydown pad. The ground cover would catch any material that is released from the equipment and the cover would be disposed of in accordance with established practice.

As has been mentioned above, excavated soil would be used as cover, or fill, to the greatest extent possible. Any solid waste generated from the proposed action would be disposed of in the Hanford Site Solid Waste Landfill or another appropriate location according to all applicable state and federal laws and regulations and DOE orders and guidelines.

Any contaminated soil, if encountered, would be barreled, characterized, and disposed of according to all pertinent regulations, guidelines, and orders. A field survey already conducted has indicated that the primary routing for the activities would not generate a substantial amount of contaminated soil.

An excavation permit has already been obtained for the excavation activities previously mentioned.

Noise levels would rise in the immediate vicinity of Tank 241-SY-101 and would last for the duration of trenching, excavation, and concrete pad installation activities.

A special radiation work permit (SRWP) would be prepared to control radiological exposure to onsite workers before work is performed in the area of the laydown pad while contaminated equipment is on the pad. radiological dose rates would be obtained before the SRWP is prepared.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REVIEW

The Westinghouse Hanford Company NEPA Documentation Function has reviewed this proposed action for the appropriate NEPA documentation and believes that this action would be covered under a Categorical Exclusion (CX) as defined in the Code of Federal Regulations (CFR), 10 CFR 1021, Subpart D, Appendix B. The CX is included as follows for DOE review and determination:

- B1.15 "Siting, construction, and operation of small-scale support buildings and support structures (including prefabricated buildings and trailers) and/ or small-scale modifications of existing buildings or structures, within or contiguous to an already developed area (where site utilities and roads are available). Covered support buildings and structures (and/or modifications) include those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; employee health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (including security posts); fire protection; and similar support purposes, but excluding facilities for waste storage activities, except as provided in other parts of this appendix."

ELIGIBILITY CRITERIA

The proposed activity meets the eligibility criteria of 10 CFR 1021.410(b), since there are no extraordinary circumstances that may affect the significance of the environmental effects of the proposal. The proposed activity is not "connected" to other actions with potentially significant impacts (40 CFR 1508.25[a][1]) or with cumulatively significant impacts (40 CFR 1508.25[a][2]) and is not precluded by 10 CFR 1021.211.

The "Integral Elements" of 10 CFR 1021 are satisfied as discussed below:

INTEGRAL ELEMENTS 10 CFR 1021, SUBPART D, APPENDIX B	
Would the Proposed Action:	Comment or explanation:
Threaten a violation of environmental, safety or health laws, regulations, or DOE Orders?	The proposed activity would not violate environmental laws, regulations, or DOE Orders.
Require siting, construction or major expansion of waste treatment, storage, or disposal facilities?	Any waste created would not require an expansion of any waste disposal facility.
Disturb hazardous substances preexisting in the environment, allowing uncontrolled releases?	The project would not disturb preexisting hazardous substances.
Adversely affect archeological or historical property?	Archaeological or historical property would not be affected by the proposed activity.
Adversely affect Federally- or state listed, proposed or candidate, threatened or endangered species or habitat?	All work would take place inside an already disturbed area and would not impact habitat or sensitive species.
Adversely affect floodplains or wetlands?	The activity would not be located on 100-year floodplains or within designated wetlands.
Adversely affect wild and scenic rivers, state or Federal wildlife refuges or specially designated areas?	The proposed activity would not be located on any specially designated areas.
Affect special sources of water?	The proposed activities would not affect special sources of water.

The proposed actions fulfill all the conditions of Subpart D, CX B1.15, for the siting of small-scale support structures. The work to be performed would provide a laydown concrete pad. The pad would support the installation of the Tank 241-SY-101 mixer pump and miscellaneous equipment.

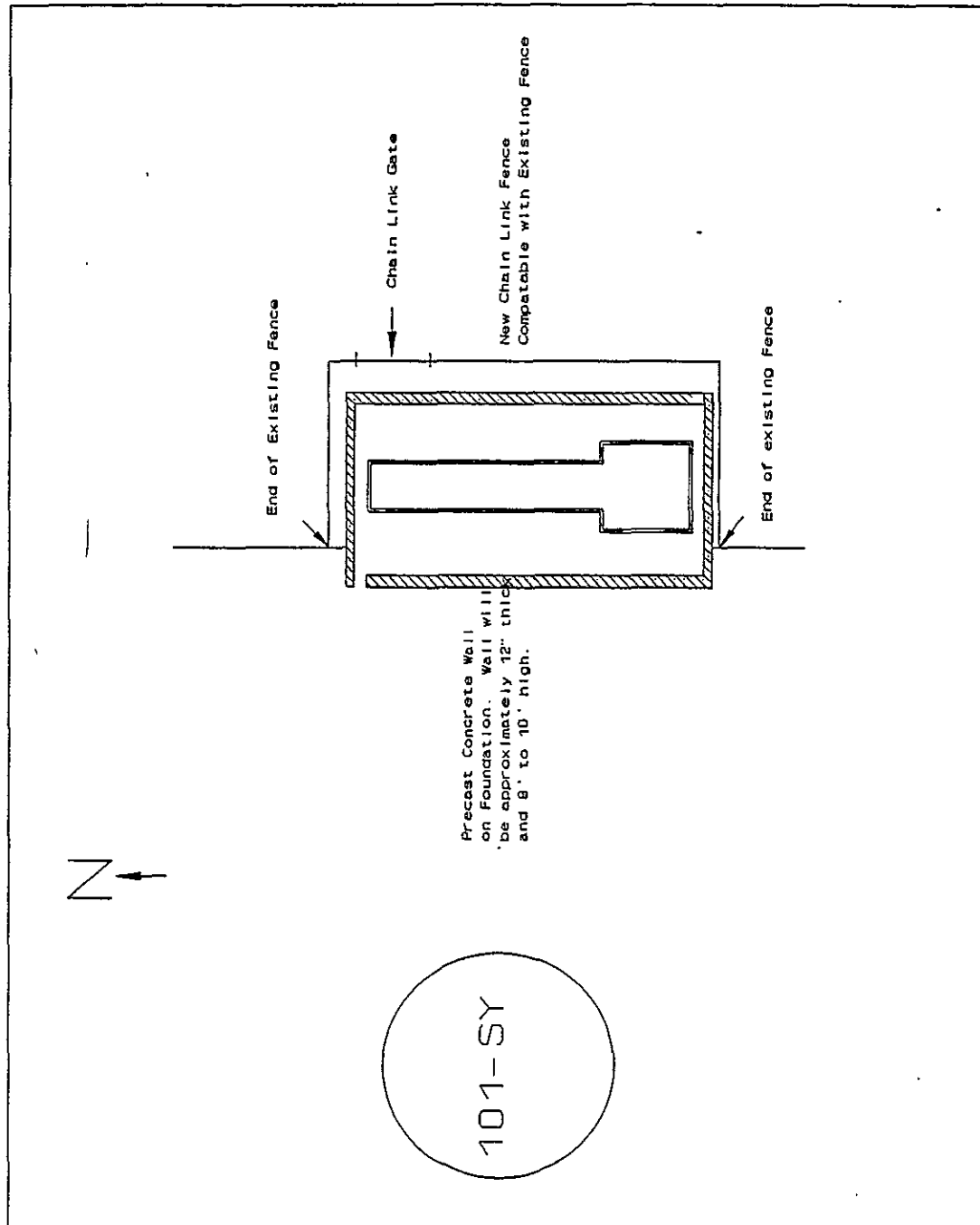


Figure 1 Location of Laydown Pad Within 241-SY-101 Tank Farm

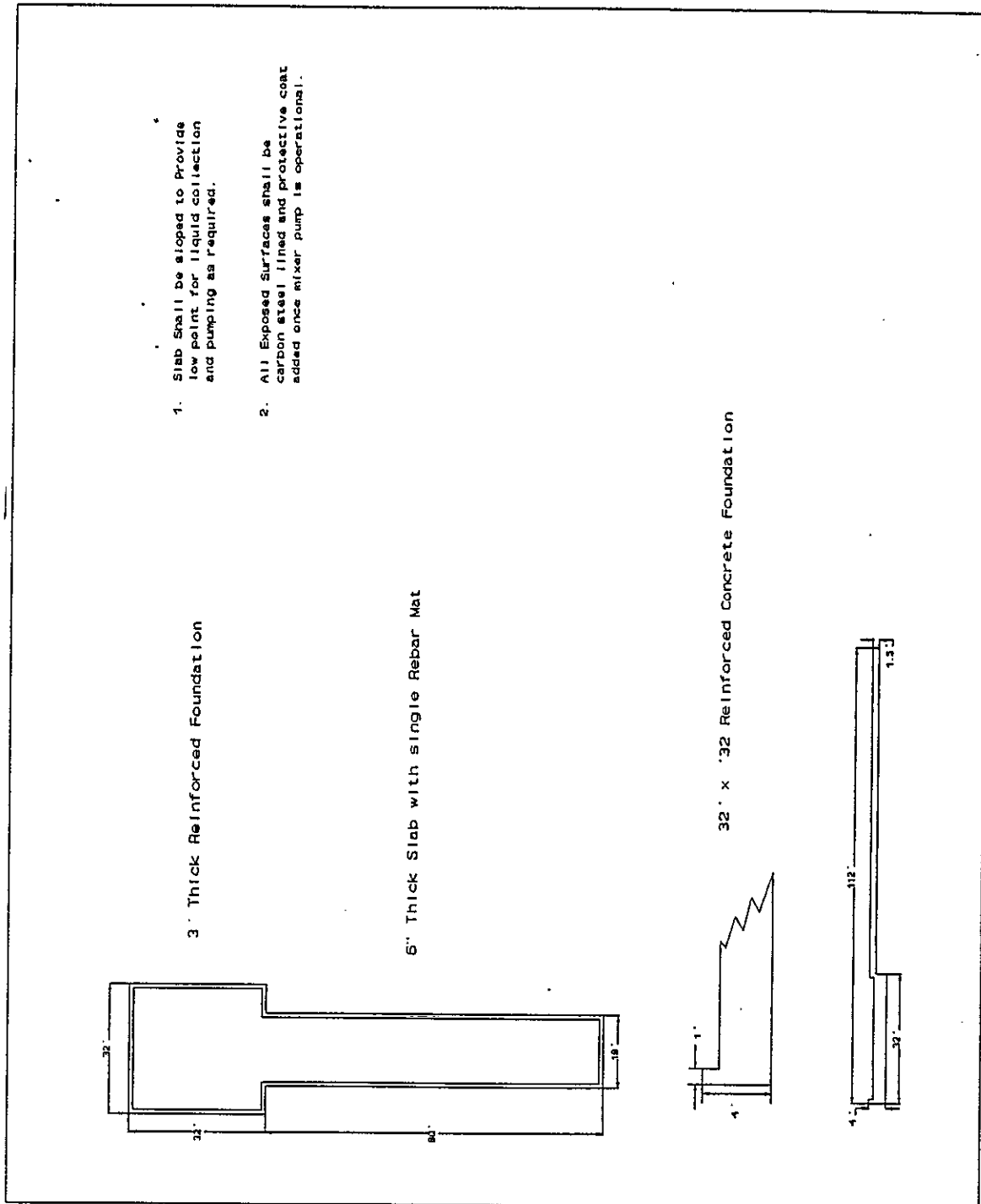


Figure 2 General Design Configuration of Laydown Pad

9258943

Attachment 2

9 1 2 3 4 5 6 7 8 9 10 11 12 13

CATEGORICAL EXCLUSION FOR
THE INSTALLATION OF TANK 241-SY-101 MIXER PUMP AND ANCILLARY EQUIPMENT SUPPORT
STRUCTURE CONCRETE LAYDOWN PAD,
200 WEST AREA, HANFORD SITE, RICHLAND, WASHINGTON

Proposed Action:

The U.S. Department of Energy (DOE), Richland Field Office (RL) proposes to install a concrete laydown pad for the Tank 241-SY-101 mixer pump and miscellaneous equipment within the 241-SY Tank Farm.

Location of Action

200 West Area, Hanford Site, Richland, Washington

Description of Proposed Action

The proposed action would be to install an emergency concrete laydown pad within the 241-SY Tank Farm. The pad would provide radiological shielding and impoundment for potential contaminated material leaking from the equipment which has been removed from the tank. The pad would be lined with carbon steel plate to provide the primary containment and the pad would serve as the secondary containment boundary. Initially, the carbon steel liner would not have a protective coating until after the 241-SY-101 Tank test mitigation mixer pump is installed and operational. Once the pump is determined to be operational, the liner would be coated in a manner to minimize corrosion and maximize the decontamination potential. Added precast concrete shielding walls, around the perimeter of the pad, would protect personnel working in the area from radiation exposure. The pad would primarily be used to accommodate the 241-SY-101 mixer pump if it is removed from the tank for repairs, or storage until the pump is determined to be waste. The pad design would comply with all the requirements for a 90-Day storage pad.

The overall length of the pad would be 112 feet long and 32 feet wide at one end and 20 feet wide at the other. The pad and liner would be constructed to provide low point collection of liquids.

CX to be Applied

The following CX was published in the Friday, April 24, 1992,
"National Environmental Policy Act (NEPA); Implementing Procedures and
Guidelines Revocation; Final Rule and Notice," published in the 57 Federal
Register 15122:

Bl.15 "Siting, construction, and operation of small-scale support buildings and support structures (including prefabricated buildings and trailers) and/ or small-scale modifications of existing buildings or structures, within or contiguous to an already developed area (where site utilities and roads are available). Covered support buildings and structures (and/or modifications) include those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; employee health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (including security posts); fire protection; and similar support purposes, but excluding facilities for waste storage activities, except as provided in other parts of this appendix."

This CX is appropriate, because the action would not have a significant effect on the human environment and meets the conditions for the CX: does not have extraordinary circumstances; is not connected to other actions with potentially significant impacts; is not precluded by 40 Code of Federal Regulations (CFR) 1506.1 or 10 CFR 1021.211; does not threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, or health, including DOE orders; does not require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities; does not disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act-excluded petroleum or natural gas products that preexist in the environment causing uncontrolled or unpermitted releases; does not adversely impact environmentally sensitive resources such as historic properties, cultural resources, threatened or endangered species, and floodplains and wetlands. Documentation for the project indicating satisfaction of the conditions of this CX will be retained by RL.

93120030225

I have reviewed the documentation and do not object to the use of this CX.

Signature: Paul F. X. Dunigan, Jr.
Paul F. X. Dunigan, Jr.
RL NEPA Compliance Officer

Compliance Action

I have determined that the proposed action meets the requirements for the CX referenced above. Therefore, I have determined, using the authority delegated to me by the Assistant Secretary of Environmental Restoration and Waste Management, that the proposed action may be categorically excluded from further NEPA review and documentation.

Signature: John D. Wagoner 12-5-92
for John D. Wagoner, Manager Date
Richland Field Office

EH-25 has reviewed this determination* and has no objection.

Signature: Carol M. Borgstrom
Carol M. Borgstrom, Director Date
Office of NEPA Oversight, EH-25

*TANK 241-SY-101

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

J. D. Wagoner, RL

Addressee

C. M. Borgstrom, DOE-HQ

Correspondence No.

INCOMING: 9208765

Subject: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) CATEGORICAL EXCLUSION (CX)
DETERMINATION: INSTALLATION OF TANK 241-SY-101 MIXER PUMP AND
ANCILLARY EQUIPMENT SUPPORT STRUCTURE CONCRETE LAYDOWN PAD,
200 WEST AREA, HANFORD SITE

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		President's Office	B3-01	
		G. M. Christensen	H4-21	X
		R. H. Engelmann	H6-26	X
		G. W. Jackson, Assignee	H6-20	
		J. W. Lentsch	H4-21	X
		H. E. McGuire, Level 1	B3-63	
		S. R. Tifft	H6-26	X
		EDMC	H6-08	X

